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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/536,524	05/25/2005	Horst Henkel	HENKEL, H-1 (PCT)	6471

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EXAMINER	
HUYNH, HAI H	

ART UNIT	PAPER NUMBER
3747	

MAIL DATE	DELIVERY MODE
09/17/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/536,524	HENKEL, HORST	
	Examiner	Art Unit	
	Hai H. Huynh	3747	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *25 May 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *27-51* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *27-51* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *See Continuation Sheet*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :8-26-05, 10-31-05, 5-7-07, 7-9-07.

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of Group I in the reply filed on July 5, 2007 is acknowledged. The traversal is on the ground(s) that the guide duct is implemented in the form of a pre-manufactured tube, which is integrated inside of the cylinder crankcase when the cylinder crankcase is cast. This is found persuasive.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 27-31, 48-51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Malsbenden et al (DE 4341040) in view of Amaral (4,852,534).

Malsbenden et al teach a guide duct, which leads a fluid medium to a required location, the duct being implemented in the form of a tube 7 and being embedded inside the part when the latter is cast, the fluid medium being oil and the at least one guide duct being an oil supply line to a crankshaft bearing to be lubricated as the required location. Malsbenden et al do not teach a multiple ducts. Amaral teaches the connection tubes being each bent and each having a bend from which one section runs to a crankshaft bearing and another section (7b) runs to a camshaft bearing. Therefore it would have been obvious to one having ordinary

skill in the art at the time the invention was made to employ the multiple ducts on the cast engine of Malsbenden et al as taught by Amaral in order to provide lubricant to the required locations.

4. Claim 32 is rejected under 35 U.S.C. 103(a) as being unpatentable over Malsbenden et al (DE 4341040 in view of Amaral (4,852,534), and further in view of Bing et al (5,947,065).

Malsbenden et al in view of Amaral teach the claimed limitations except for a guide duct embedded as a tube, which forms a supply line for piston cooling. Bing et al teach a guide duct 6 embedded as a tube, which forms a supply line for piston cooling. Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to employ the guide duct embedded as a tube as taught by Bing et al in order to improve the cooling system.

5. Claim 33 is rejected under 35 U.S.C. 103(a) as being unpatentable over Malsbenden et al (DE 4341040) in view of Amaral (4,852,534), and further in view of Stelzer et al (6,237,569).

Malsbenden et al in view of Amaral teach the claimed invention except for a guide duct, which forms a fuel line for supplying a fuel. Stelzer et al teach a guide duct 3 forms as a fuel line. Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to employ the fuel line as taught by Stelzer et al in order to protect the fuel system from external influence and damages.

6. Claims 34-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Malsbenden et al (DE 4341040) in view of Bing et al (5,947,065).

Malsbenden et al teach a cylinder crankcase which has at least one guide duct, which leads a fluid medium to a required location, the duct being implemented in the form of a tube and being embedded inside the part when the latter is cast. Malsbenden et al do not teach the guide duct embedded as a tube forms a supply line for piston cooling. Bing et al teach a guide duct 6 embedded as a tube forms a supply line for piston cooling. Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to employ the cooling channel on the system of Malsbenden et al as taught by Bing et al in order to improve the piston cooling.

7. Claims 39-47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Malsbenden et al (DE 4341040) in view of Stelzer et al (6,237,569).

Malsbenden et al teach the claimed limitations except for a guide duct forms a fuel line. Stelzer et al teach a fuel duct 3 forms a fuel line. Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to employ the guide duct forms a fuel line on the system of Malsbenden et al as taught by Stelzer et al in order to prevent leakage in the fuel system.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hai H. Huynh whose telephone number is (571) 272-

4844. The examiner can normally be reached on Monday through Thursday from 7:30 am to 6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Cronin can be reached on (571) 272-4536. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Hai H. Huynh
Primary Examiner
Art Unit 3747